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14 ABSTRACT

15. SUBJECT TERMS

The collapse of the Soviet Union transformed the world from a bi-polar entity to a multi-polar one. Like pieces of a newly scattered puzzle, many countries are searching for their place in the emerging multi-polar security environment of the 21st Century. A significant factor in the rebuilding process is based upon economic security, driven by the interactions of competitive forces. The competitive forces, threat of new entrants, suppliers, buyers, products substitutes, and rivalry intensity, create a push-pull interaction that results in countries jockeying for position as a means to exert dominance, or perhaps, even survival. An analysis of the competitive forces provides a methodology for planners to identify future threats to U.S. interests, thereby, focusing their efforts and capabilities development. Moreover, the competitive force analysis bridges the gap between threat-based planning and capabilities-based planning.

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James K. Lee. Jr.
Major, USA
A paper submitted to the faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.
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INTRODUCTION

"Each nation is like a big corporation competing in the global market place"

President Bill Clinton

The collapse of the Soviet Union transformed the world from a bi-polar entity to a multi-polar one. Like pieces of a newly scattered puzzle, many countries are searching for their place in the emerging multi-polar security environment of the 21st Century. Some nations, as exemplified by the United States, have reacted to this broken puzzle phenomenon by focusing their efforts on failed or failing states and trying to figure out how to address their needs in order to deny a terrorist safe haven. Meanwhile, other nations have exerted more influence in regions/nations through the establishment of economic, political, and cooperative security agreements, essentially reassembling the puzzle in their favor.

Therefore, in order to create the puzzle that serves its national interests and objectives, the United States must begin shaping the political environment as opposed to letting the pieces fall as they may.

Equally important, posturing the United States to counter future threats requires military planners to envisage the puzzle realignment as well. Specifically, planners must determine an approach that identifies future threats with some level of certainty in order to focus their efforts. Traditionally, planners applied a threat-based approach that emphasized planning against a specific adversary, primarily the Soviet Union. More recently, capabilities-based planning has emerged as the desired approach that emphasizes the capabilities an adversary may employ. Specifically, the 2001 QDR states that "capabilities-

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¹ One could argue that the United States is uncontested and a multi-polar system does not exist. However, The EU is a powerful economic entity capable of challenging the United States. Furthermore, permanent members of the UN Security Council, France, Germany, and China, consistently challenge U.S. interests.

based planning is necessary to prepare for a more diverse and uncertain set of security threats..." Certainly, a shortfall with the capabilities approach is the acceptance of an uncertain future. Under a resource constrained environment, planners need to reduce the field of potential adversaries to, identifying necessary capabilities to synchronize with other elements of national power in order to focus planning efforts.

Regularly, Geographic Combatant Commanders face the challenge of translating overwhelming guidance from documents such as the National Security Strategy (NSS), National Defense Strategy (NDS), National Military Strategy (NMS), Joint Strategic Capabilities Plan (JSCP), Unified Command Plan (UCP), Transformation Planning Guidance (TPG), and the Quadrennial Defense Review (QDR). Oftentimes, these documents are not synchronized and even conflict with one another. For instance, the NDS states "our goal is not dominance in all areas of military capability, but the means to reduce vulnerabilities while fortifying war-fighting advantages." Conversely, the NMS argues for "full spectrum dominance (FSD) – the ability to control any situation or defeat any adversary across the range of military operations." Moreover, the documents appear to focus as much on influencing resource allocation versus future capability requirements. As a result, Combatant Commanders need to sift through the clutter in order to provide the best strategy for combating future threats.⁵ Accordingly, there are competitive forces that will affect the realignment of future nations and their interests. Understanding these forces will facilitate both strategic and combatant command operational planners in identifying future

² Christopher Lamb, *Transforming Defense* (Washington, D.C.: National Defense University), National Defense University Press, September 2005, 13.

³ Department of Defense, *National Defense Strategy* (Washington, D.C.: Department of Defense, March, 2005), 15

⁴ Department of Defense, *National Military Strategy* (Washington, D.C.: Department of Defense, 2004), 23

⁵ According JP 3-0, pg x, "CCDRS are the vital link between those who determine national security policy and strategy and the military forces or subordinate joint force commanders (JFCs) that conduct military operations."

competitors. Therefore, the Forces of Competition model, employed by private industry, provides a methodology to identify future threats to the United States and focus planner's efforts and capabilities' development.

"Since wealth is the main source of military capability and other means of influence, cooperation that creates and distributes wealth affects security as well as welfare"

Peter Liberman

FIVE FORCES OF COMPETITION

"The five forces model suggests that an industry's profitability is a function of interactions among five forces: potential entrants into the industry, suppliers, buyers, product substitutes, and competitive rivalry among firms in the industry." This economic based model will assist planners' understanding of the importance the military plays in assuring United States' economic security and identifying threats to its security. According to Vincent Cable, economic security "refers to those aspects of trade and investment which directly affect a country's ability to defend itself such as, freedom to acquire weapons or related technology, reliability of supplies of military equipment, or threats of adversaries acquiring a technological advantage in weapons." Additionally, Samuel Huntington claims that economic security is the most important source of power that will determine the primacy or subordination of states. To achieve economic security, a nation must have both the political influence and complementary military capability in order to gain access to markets as both a supplier and buyer (importer/exporter) while moderating a competing country's access. In short, security is the ability of a nation to protect its interests, which further

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⁶ Michael A. Hitt, R. Duane Ireland, Robert E. Hoskisson, *Strategic Management: Competitiveness and Globalization*, 6th ed. (Mason: South-Western, 2005), 16.

⁷ Vincent Cable, "What is International Security?," *International Affairs* 71, no. 2 (April 1995), 306, http://www.jstor.org/ (assessed 26 March 2007)

⁸ Ibid, 308

requires the capability to project power globally. An analysis of the competitive forces surrounding economic security will assist planners in identifying potential future threats to U.S. interests.

Threat of New Entrants

The first competitive force is the threat of new entrants. Companies must identify new entrants since "they can threaten the market share of existing competitors" and bring additional capabilities into the industry. However, barriers to entry and expected reactions of existing competitors significantly impact the seriousness of the potential new threat. For instance, a potential entrant may find that costs associated with competing in the industry are too high, or that current competitors may retaliate against them in order to maintain their dominant position. ¹⁰ Certainly, the introduction of new technology changes barriers to entry, therefore, strategists/planners must closely monitor technological innovations in order to maintain a competitive edge in the industry.

Similarly, countries also create entry barriers, making it difficult for smaller countries to exert global influence. For instance, possession of nuclear weaponry is a national defense barrier to entry, with fewer than ten countries nuclear weapon capable. Accordingly, a country that develops a nuclear weapon can exert more influence and negotiate agreements from a more favorable position. Additionally, countries only possessing nuclear energy possess more clout and influence than non-nuclear countries. As a result, the United States, along with other nuclear capable countries try and contain the distribution of nuclear technology from what they perceive as hostile countries such as, Iran. For instance, "since 1980, Iran's energy demand growth (6.4%) has exceeded supply growth (5.6%) with exports

⁹ Hitt, Ireland, & Hoskisson, 53.

¹⁰ Ibid, 54

stagnant since a 1996 peak."¹¹ As a result, Iran is seeking nuclear energy to offset a weakening oil exportation that subsidizes its country. In brief, a country that has nuclear weapon capability is more capable of challenging U.S. interests, and certainly in a position to force the United States to the negotiation table, than a country with zero nuclear capability.

Yet, another factor to consider is a country's force projection capability. Not only is this capability a barrier to entry, but it limits the options of other nations in dealing with their security issues. Currently, the United States is the only country capable of sustainable force projection around the globe. In fact, U.S. force projection in the Gulf region ensures that oil cartel states can collect sufficient monopoly rents without wars of seizure. 12 Nations structure their militaries across the continuum of force projection capability. For instance, force structures could range from border/internal self-defense, to global projection. An increase in its force projection capability increases a country's ability to influence/counter U.S. interests. Interestingly, experts predict that China's military growth will produce a sustained, force projection capability far beyond its periphery with the next two decades.¹³ Additional barriers may not be quite as tangible to analyze, but equally important. To explain, a country may not challenge U.S. interests out of fear of losing a political, economic, or military partner. Nonetheless, planners should factor in these considerations when conducting their analysis, despite their intangibility. In short, threat of new entrants, based on barriers to entry, provides potential threat indicators for planning considerations.

¹¹ Roger Stern, "The Iranian Petroleum Crisis and United States National Security," *Proceedings of the National Academy of Sciences of the United States of America* 104, no. 1 (January 2007), 377, http://www.pnas.org/ (assessed 26 March 2007)

¹² Ibid

¹³ Marvin C. Ott, "Southeast Asian Security Challenges: America's Response?," *Joint Force Quarterly*, no. 45 (2nd Quarter 2007): 18.

Bargaining Power of Suppliers

Next, suppliers exert bargaining power on industry competitors by either increasing their prices or reducing the quality of their products or services.¹⁴ Moreover, a supplier group is more powerful when a few larger companies dominate the market, satisfactory substitute products are unavailable, industry firms are not a significant customer, the suppliers' goods are critical to buyer's marketplace success, a supplier's effectiveness creates high switching costs for industry firms, or the supplier threatens to integrate forward into the buyer's industry.¹⁵ In brief, suppliers can exert influence over buyers when their commodity is in high demand.

Similarly, export countries (suppliers) wield bargaining power in order to influence their buyers (importers). For example, oil producing countries, individually or collectively (OPEC), have direct influence over the world economy. Therefore, they are able to bargain with more powerful countries over differing politically sensitive issues. In fact, Roger Stern argues that history has proven that oil serves as a weapon, and when an exporter (supplier) can deny most supply, the oil weapon has power. For instance, in response to U.S. arms support to Israel in 1973, Arab countries threatened to reduce their productions by five percent each month until Israel's 1967 borders were reestablished. Consequently, "Secretary Kissinger spent much of 1974 beseeching Arab leaders to end the embargo." In this example, the Arab world wielded its power as an oil supplier.

¹⁴ Michael E. Porter, "How Competitive Forces Shape Strategy," *Harvard Business Review* (March-April 1979), 140, http://www.search.ebscohost.com (assessed 24 March 2007).

¹⁵ Hitt, Irelad, & Hoskisson, 56

¹⁶ Roger Stern, "Oil Market Power and United States National Security," *Proceedings of the National Academy of Sciences of the United States of America* 103, no. 5 (January 2006), 1650, http://www.pnas.org/ (assessed 26 March 2007).

¹⁷ Ibid, 1651

With this in mind, another indicator for consideration within the competitive forces is a country's control of critical resources. Critical resources (natural/man-made) provide both bargaining power and wealth, depending on the product's market rate. To illustrate, "Russia is the world's largest producer of natural gas and ranks among the top four countries in terms of oil deposits," providing Russia with bargaining power. Also, recent oil market rates have contributed to substantial economic growth, allowing Russia to improve its hard currency reserves and boost its military spending.¹⁹ Therefore, planners should familiarize themselves with the resources, both natural and manmade, countries produce within their area of responsibility and to whom they supply. Moreover, they should be cognizant of the market rates and consider the effects of the rates on the exporters' economy.

Bargaining Power of Buyers

Industry buyers can also exert bargaining power by demanding increased quality at a lower cost, thereby increasing their profit margins (or economic prosperity).²⁰ A buyer group is powerful when it's a significant procurer of the overall output, can integrate backwards and begin production of the necessary commodity, can easily switch to another supplier due to the product's availability, and/or when the sales of the product contribute significantly to the seller's annual revenues. ²¹ For instance, a country that derives its primary source of revenue from a readily available commodity is more vulnerable to buyers' demands.

Likewise, significant import countries (buyers) are capable of exerting bargaining power against their exporters (sellers). For instance, China is the second largest importer of oil in the world, relying on foreign suppliers for 40 percent of its demand. Interestingly,

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¹⁸ Milan Vego, "Russia and the Return of Geopolitics," *Joint Force Quarterly*, no. 45 (2nd Quarter 2007): 10. ¹⁹ Ibid

²⁰ Hitt, Ireland, & Hoskisson, 57

²¹ Ibid

China's demands will increase its foreign dependency to 80 percent of its demands by 2025.²² As a result, China's influence has expanded globally on par with its oil interests, providing it with significant bargaining power. Thus, China is competing with the United States over oil in West Africa. Currently, the United States receives 15 percent of its oil from the West African region, which will increase to over 20 percent over the next decade.²³ However, China is investing heavily in the region, not only in oil purchases, but in the construction of oil pipelines and export terminals to facilitate the export process.²⁴ It may be the case that China is positioning itself to counter U.S. interests in the region and threaten U.S. economic security.

Based on this information, another threat indicator emerges that a planner could analyze, the quantity of critical resources a country imports such as, oil. The more the country imports (purchases), the more influence they can exert over the supplier and other countries competing over the same limited commodity in a limited supplier economy. If a commodity dissipates over time, then as reserves dwindle, competition increases. Arguably, the United States does not exert influence over Venezuela or Saudi Arabia, despite being a significant buyer of their oil. However, these countries have equally, if not more financially affluent customers/trading partners that provide a counter balance to U.S. power on either an individual or collective basis. Nonetheless, buyers with the ability to switch out of the relationship ultimately exercise more influence. One factor that potentially facilitates a buyer's ability to make the switch is a product substitute.

²² Gordon S. Magenheim, "Chinese Influence on U.S. Operational Access to African Seaports," *Joint Force* Quarterly, no. 45 (2nd Quarter 2007): 22.

²⁴ Ibid, 25

Threat of Substitute Products

The threat of product substitutes acts as a competitive force when a firm's customers confront minimum switching costs and the substitute product's price is lower, or when its quality and performance capabilities exceed those of the competing product. ²⁵ Naturally, alternative energy sources such as, wind or solar, may one day be an economical substitute for fossil fuel energy, allowing countries to reduce their dependency on foreign oil, thereby increasing their bargaining power while reducing their suppliers. To analyze this competitive force, planners could track the introduction of products that promise to revolutionize industry, namely, the increased usage rate and the affects on producers of the replaced products. Specifically, changes in technology that allows a country to wean itself from a particular import or, technological or process advances that allows a country to operate more efficiently, thereby improving its economy. These innovations will not impact society immediately, providing time for planners to foresee future consequences.

Yet another example could be security/military related substitute products. To illustrate, assume that Russia is selling a military related product to another country. Then, India enters the market with an improved substitute or perhaps China with a more cost efficient replica. Instead of continuing to purchase from Russia, the buyer now purchases it from India or China, resulting in a change in the competitive force as Russia now loses revenue and a new technology threatens its security.

Intensity of Rivalry Among Competitors

Lastly, intense rivalry among competitors is also a competitive force where companies essentially jockey for position within the industry. Companies may employ several tactics like price competition, introducing a new product, or through intense

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²⁵ Hitt, Ireland, & Hoskisson, 57

advertising.²⁶ Moreover, several factors determine the level of intensity. First, either numerous companies in a given industry exist or there are very few companies equally balanced in size and power within the industry. Therefore, actions by one company will certainly elicit a response by another within the industry. Second, high exit barriers may cause companies to compete in an industry where their returns are low or perhaps even negative. For example, the company may feel compelled to remain in an industry due to established strategic interrelationships, emotional barriers, or governmental or social restrictions. Third, high strategic stakes also contribute to intense rivalry, particularly when it is important for several of the competitors to perform well.²⁷ On the whole, a company's actions in a competitive environment may result in unintended reactions from others as they maneuver to a more advantageous position.

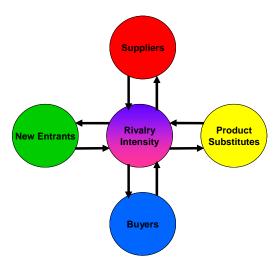
Just like businesses, countries also jockey for position in order to protect their interests. In other words, countries may partner on trade or cooperative security agreements in order to counter or balance a third country's influence. The balance of power theory hypothesizes "that because states in anarchy have an interest in maximizing their long-term odds of survival (security), they will check dangerous concentrations of power (hegemony) by building up their own capabilities (internal balancing) or by aggregating their capabilities with other states in alliances (external balancing)."²⁸ This theory clearly demonstrates the continuous push-pull interactions of the previous competitive forces against rivalry intensity. As suppliers, buyers, new entrants, and substitute products push against competitors, then the

Porter, "How Competitive Forces Shape Strategy", 142
 Hitt, Ireland, & Hoskisson, 58-59

²⁸ Stephen G. & William C. Wohlforth Brooks, "Hard Times for Soft Balancing," *International Security* 30, no. 1 (Summer 2005), 76-77, http://muse.jhu.edu (assessed 26 March 2007).

level of intensity from competitors increase and push back, as portrayed in Figure 1. The process is ongoing as countries contrive for a more affluent position.

Fig. 1 Competitive Force Interactions



In like fashion, the United States is facing intense competition on a global scale as countries jockey for position to counter U.S. influence.

Namely, China views globalization as a means to counter U.S. hegemony, while simultaneously increasing its ability to protect its economic interests and assert more global leadership.²⁹

Furthermore, China has increased its involvement in the UN Security Council, has established political alignments, like the Shanghai Cooperation Organization, and has developed substantial global trading partners. Likewise, Russia is jockeying to challenge U.S. interests. Under President Putin, Russia's economy has averaged six percent growth annually, allowing Russia to funnel more money back into defense and bolster its military, spending four percent of its GDP in 2006 on military expenditures.³⁰ Also, as a member of the Shanghai Cooperation Organization, Russia, along with China and other Central Asian countries, can challenge U.S. interests in the region.³¹

Accordingly, intense rivalry provides several competitive indicators for planners.

First, the percent of its GDP a country spends on the military is an indicator of future means

²⁹ Deng, Yong & Thomas G. Moore, "China Views Globalization: Toward a New Great-Power Politics?," *The Washington Quarterly* 27, no. 3 (Summer 2004), 123, http://muse.jhu.edu (assessed 29 March 2007).

³⁰ Vego. 10

³¹ Deng & Moore, 126

to exert influence in contested areas. Second, forming an alliance is a factor that must be considered, particularly, identifying both its members and its purpose. When dealing with alliances, the planner must consider all the indicators of the competitive forces collectively and compare them against the United States and/or its alliance(s). Third, a country's productivity is an indicator of intense economic competitiveness. In fact, Porter argues that in today's global economy, productivity will determine the prosperity of a state more than its exports or natural resources.³² Furthermore, Ralph Hawtrey, a British Economist, states that 'The major concern of the state is prestige. The means to prestige is power. Power is economic productivity capable of being applied as a force.' ³³

Arguably, the more self-sufficient a country, the less likely it is to succumb to another country's demands, thereby reducing rivalry intensity. Thus, planners could consider the degree of a country's self-sufficiency. Based on an assumption that a country who exports more than it imports is more self-sufficient, planners could analyze a country's ratio of its imports to exports. Granted, the type of products a country imports/exports must be considered. For instance, a report by the UN Development Programme suggests that domestic food production is a national security concern that reduces future vulnerability and provides increased self-sufficiency. With this in mind, the planner should focus on the import/export ratios of physiologic and economic sustainment products such as, agricultural or fossil fuels products.

Also, a prosperous economy provides a source of power and influence for a country.

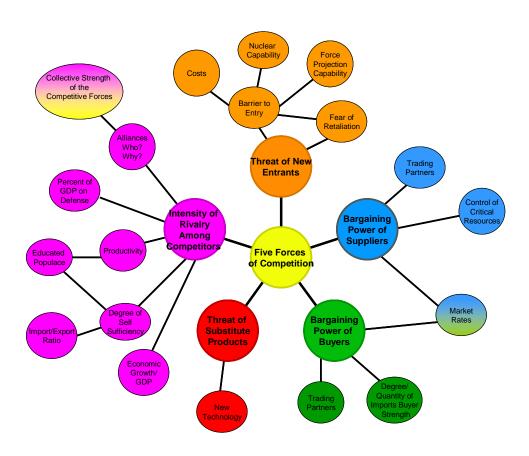
Therefore, a country's economic growth rate or its GDP can be an indicator of future threats.

³² Michael E. Porter, "Clusters and the New Economics of Competition," *Harvard Business Review* (Nov-Dec 1998), 84, http://infotrac.galegroup.com/ (assessed 28 March 2007).

³³ Cable, 308

³⁴ Development Programme United Nations, *Asia-Pacific Human Development Report* 2006, 72, http://www.undprcc.lk/rdhr report.asp (assessed 24 March 2007).

To illustrate, consider China's trade relations with the United States. Its relative gains surpass the United States and it is also the second leading foreign holder of U.S. debt.³⁵ More startling, is China's expeditious economic growth over the previous fifteen years, achieving an approximate growth rate of nine percent.³⁶ Furthermore, its GDP surpassed the United States' GDP over the past seven years, facilitating a substantial increase in military spending.³⁷ Consequently, the United States faces a dilemma on how to contain China's growing influence. (Figure 2 provides an overview of the competitive forces and their relationships with the indicators/factors previously discussed.)



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³⁵ Deng & Moore, 132

³⁶ Ott, 18

³⁷ Magenheim, 22

Fig. 2 Competitive Forces' Relationships

ANALYSIS OVERVIEW

Once a planner understands the occurring interaction of the competitive forces, the next process is to collect and analyze the data. To begin, the planner should identify which countries they want to analyze and the factors to compare the countries. Much of the data can be found in the CIA World Factbook, or through agencies like the Departments of Energy, Commerce, or State.³⁸ Also, research from scholarly sources is recommended in order to apply a cultural interpretation of the data gathered. Next, planners should then compare the countries. One method of comparison is to use a process similar to a relative combat power analysis. However, instead of using the elements of combat power, the planner can apply the factors or indicators derived from the competitive force theory to conduct the analysis. Lastly, the planners should review the results of the data, apply the intangibles derived from research on a particular nation, assess the countries' future intent (historical knowledge regarding the countries would greatly assist), and then identify the most likely future threat to U.S. interests.

Table I provides an example of the assessment. The planner first identified four countries (Country A, B, C, D) to analyze and chose the factors in which to compare: nuclear Table I Competitive Force Analysis

Country	Nuclear Capability	Force Projection Capability	Control over Critical Resources	Degree of Self- Sufficiency	GDP/Economic Growth Rate	% GDP on Defense	Productivity Rate	Total
Α	5	3	2	3	8	8	9	38
В	4	4	3	3	6.5	4	7	31.5
С	2	3	2	2	5	3	6.5	23.5
D	1	3	5	4	6	2.5	3	24.5

³⁸ The CIA also provides a classified World Factbook on SIPR that contains additional information.

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capability, force projection capability, control over critical resources, degree of self-sufficiency, GDP/Economic growth rate, percent GDP spent on defense, and productivity rate. Next, the planner developed a matrix for each individual factor and applied a weighting system. In Table II, the planner assessed each country's nuclear capability.

Table II Nuclear Capability Analysis

Country	Nuclear Weapons - 5	Nuclear Power (no weapons) - 4	Developing Nuclear Weapons - 3	Seeking to Develop - 2	No Known Interest for Nuclear - 1
Α	х				
В		х			
С				х	
D					х

Based on the weighted
criteria, a country could

weapons, and one being the country which has no known desire for nuclear capability (energy or weapons). Obviously, the highest score in this assessment revealed the most likely threat to U.S. interests. The additional factors are not shown here, but the planner can apply the same process to each and weight them similarly. However, the percentage factors (GDP/Economic Growth rate, percent of GDP spent on defense, and productivity rate) used the raw data as the scoring criteria, again, the higher the percentages, the increase in threat to U.S. interests. The planner must ensure the criteria be weighted consistently throughout the assessment. In this case, the highest score in each factor category in Figure 2 reveals the most likely threat to U.S. interests. Based on the analysis, country "A" is the most likely threat to U.S. interests. At this point, the planner must apply the culture's intangibles to the results to finalize the analysis such as, any potential agreements with country "A" that may

cause the next most likely threat, country "B", surpass it. Analogous to the given example, a planner may need to analyze the competitive forces of an alliance. Country "C", for instance, may be third on an individual country analysis behind countries' "A" and "B". However, established alliances with other countries may provide country "C" with collective power that increases its' ranking.

Michael Porter suggests three options once planners have evaluated the competitive forces prevalent in their area of responsibility. First, they can propose development of capabilities that provide the best defense against the competitive force. Second, they can attempt to influence the balance of the forces by recommending a strategic/operational maneuver to improve the United States' position. Third, they can anticipate shifts in the factors underlying the forces and respond to them, with the hope of exploiting change by implementing a strategic/operational plan appropriate for the new competitive balance before opponents recognize it.³⁹

Each option, or any combination of the three, will determine the development of future capabilities based upon the identified threat and/or plans to influence the environment. Specifically, option one is development of tangible capabilities to counter the threat. However, these capabilities extend beyond the military domain to the other national powers that provide the best option for countering the threat. Next, option two, is more of applying intangible capabilities/assets to countering the threat, namely, forming alliances, trade agreements, mil-to-mil contacts, etc. Finally, the third option lends itself heavily to what planners refer to as "Phase Zero" operations where the United States commits resources, for example, military or economic, to assist developing vulnerable countries, thereby, exerting U.S. influence and either gaining access to more resources or protecting its current interests.

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³⁹ Porter, "How Competitive Forces Shape Strategy", 143

SHORTFALLS/COUNTER ARGUMENT

Granted, one of the shortfalls in this process is its seeming inability to determine a country's intent behind the data. Research from multiple sources will assist in that area. Nonetheless, planners should understand that changes in competitive forces may significantly impact a country's original intentions. For example, two countries may establish an agreement to share a particular commodity. However, as the commodity dissipates, the countries may attempt to exert dominance over one another for control of the remaining supply. Likewise, long time trading partners may suddenly find themselves being torn apart due to unforeseen circumstances. Each country may have begun their relationships with positive intentions, but later found themselves battling one another economically or militarily. Moreover, one could argue that globalization and the current multi-polar world have created economic conditions that would deter future nation state conflicts among economic partners. However, 'in multi-polar systems, there are too many powers to permit any of them to draw clear and fixed lines between allies and adversaries.' ⁴⁰ For instance, in the late 19th Century, Britain developed close economic ties with Germany and the Anglo-German trade began. Germany's relative gains in the trade surpassed Britain, despite Britain's fourteen percent larger economy in 1910.⁴¹ Meanwhile, several British leaders were concerned over Germany's military buildup, referring to Germany as 'our worst enemy and our greatest danger.'42 Nonetheless, the private sector continued trading with Germany, despite warnings that 'German resources will be crippled when Great Britain introduces

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⁴⁰ Peter Liberman, "Trading with the Enemy," *International Security* 21, no. 1 (Summer 1996), 153, http://www.jstor.org/ (assessed 07 April 2007).

⁴¹ Ibid, 163

⁴² Ibid, 161

Protection', thus eroding the German's ability to initiate war with England.⁴³ Interestingly, Britain relied heavily on German manufacturing for its own military production needs, such as steel bars, optical equipment, and automobiles.⁴⁴ Overall, German trade with Britain, France, and Russia increased 105, 137, and 121 percent respectively from 1900-1913.⁴⁵

The United States provides another example of countries waging war with significant trading partners. In 1921, the United States and Britain negotiated a naval arms accord with Japan, which called for respecting China's territorial integrity and providing western countries with commercial access to China. However, in the 1930s, Japan began to expand its empire into Manchuria and northern China, thus withdrawing from the naval accord. 46 Next, Japan formerly aligned itself with Germany in the 1940 Tripartite Pact, then invaded French Indochina. The United States sought to balance Japan by increasing its military spending from \$700 million in the 1930s to \$6 billion in 1941.⁴⁷ Yet, trade with Japan continued throughout the 1930s, increasing from six percent to nine percent, then back to six percent in 1940.⁴⁸ Furthermore, Roosevelt realized the level of Japan's dependence on trade with the United States. In fact, trade with Japan amounted to less than half of one percent of the U.S. GDP, but seven percent of Japan's GDP. Specifically, Japan's primary U.S. imports were oil, iron, and cotton, all of which are used in military production. Finally, in July, 1941, after Japan's invasion of southern Indochina, the United States severed trade with Japan.⁴⁹ Meanwhile, during the 1930s, several leaders in Washington argued for economic sanctions against Japan in order to deter a Japanese military buildup, only to be over shadowed by

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⁴³ Ibid, 163

⁴⁴ Ibid, 164-5

⁴⁵ Ibid, 166

⁴⁶ Ibid, 167

⁴⁷ Ibid, 168

⁴⁸ Ibid, 168-9

⁴⁹ Ibid. 169-170

those claiming that sanctions would provoke Japan instead.⁵⁰ To summarize, these two examples clearly illustrate that economic interdependence does not deter war and how the quest for economic security can lead to war. Additionally, they illustrate the importance for planners to understand how the competitive forces interact and can assist in identifying future threats.

"If you do not create your own future, you will become the victim of the future created by someone else"

VADM Cebrowski

CONCLUSION

Currently, the global security environment is a scattered puzzle due to the collapse of the Soviet Union. However, competitive forces are interacting that will ultimately rebuild this puzzle, primarily, economic forces. A country's economic strength is a source of power and influence that demands protection. As the competitive forces infringe on a country, the country reacts by trying to reassert its political and economic foothold, in which, the military is one tool that compliments those efforts. As demonstrated, the competitive force analysis provides a methodology that bridges the gap between threat-based planning and capabilities-based planning by providing a degree of certainty in a multi-polar world, therefore, allowing planners to focus limited resources to countering potential threats.

Naturally, a threat to U.S. interests does not necessarily denote the country has intentions to combat the United States militarily. On one hand, the country may just be trying to counter, or at least balance, U.S. power/influence. On the other hand, the country's economic growth or increased demands for a resource may have forced the two countries to collide over economic interests. Additionally, the threat may choose to indirectly confront the United States militarily by supporting a surrogate country. The Vietnam War is an

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⁵⁰ Ibid, 171

example where the primary threat to U.S. interests indirectly confronted the United States militarily through a surrogate country. Likewise, as China's presence in Africa increases, the United States could once again find itself conducting military operations against a China supported surrogate country. Nonetheless, the United States must be prepared to exert influence in order to retain its dominant position globally. Identifying potential threats is the starting point and application of the forces of competition methodology provides "A Way" to assist planners in their threat assessment.

BIBLIOGRAPHY

- Brooks, Stephen G. & William C. Wohlforth. "Hard Times for Soft Balancing." *International Security* 30, no. 1 (Summer 2005): 72-108. http://muse.jhu.edu (assessed 26 March 2007).
- Cable, Vincent. "What is International Security?." *International Affairs* 71, no. 2 (April 1995): 305-324. http://www.jstor.org/ (assessed 26 March 2007).
- Deng, Yong & Thomas G. Moore. "China Views Globalization: Toward a New Great-Power Politics?." *The Washington Quarterly* 27, no. 3 (Summer 2004): 117-136. http://muse.jhu.edu (assessed 29 March 2007).
- Department of Defense. *National Defense Strategy*. Washington, D.C.: Department of Defense. March, 2005.
- Department of Defense. *National Military Strategy*. Washington, D.C.: Department of Defense. 2004.
- Hitt, Michael A., R. Duane Ireland, Robert E. Hoskisson. *Strategic Management: Competitiveness and Globalization*. 6th ed. Mason: South-Western, 2005.
- Lamb, Christopher. *Transforming Defense*. Washington, D.C.: National Defense University. National Defense University Press. September 2005.
- Liberman, Peter. "Trading With the Enemy." *International Security* 21, no. 1 (Summer 1996): 147-175. http://www.jstor.org/ (assessed 07 April 2007).
- Magenheim, Gordon S. "Chinese Influence on U.S. Operational Access to African Seaports." *Joint Force Quarterly*, no. 45 (2nd Quarter 2007): 22-32.
- Ott, Marvin C. "Southeast Asian Security Challenges: America's Response?." *Joint Force Quarterly*, no. 45 (2nd Quarter 2007): 16-21.
- Porter, Michael E. "Clusters and the New Economics of Competition." *Harvard Business Review* (Nov-Dec 1998): 77-87. http://infotrac.galegroup.com/ (assessed 28 March 2007).
- Porter, Michael E. "How Competitive Forces Shape Strategy." *Harvard Business Review* (March-April 1979): 137-145. http://www.search.ebscohost.com (assessed 24 March 2007).
- Stern, Roger. "Oil Market Power and United States National Security." *Proceedings of the National Academy of Sciences of the United States of America* 103, no. 5 (January 2006): 1650-1655. http://www.pnas.org/ (assessed 26 March 2007).

- Stern, Roger. "The Iranian Petroleum Crisis and United States National Security." *Proceedings of the National Academy of Sciences of the United States of America* 104, no. 1 (January 2007): 377-382. http://www.pnas.org/ (assessed 26 March 2007).
- United Nations, Development Programme. *Asia-Pacific Human Development Report* 2006. http://www.undprcc.lk/rdhr_report.asp (assessed 24 March 2007).
- Vego, Milan. "Russia and the Return of Geopolitics." *Joint Force Quarterly*, no. 45 (2nd Quarter 2007): 8-15.